

REMARKS

Claims 1-12 were present in the application at the time of the last Office Action - Final Rejection. Of those claims, claim 1 was the sole independent claim.

In the last Office Action claims 1-9 and 12 were finally rejected as lacking novelty under 35 U.S.C. § 102 over OTOUMA et al. (4,780,356).

Claims 10 and 11 continued to be allowable over the prior art and were simply objected to as being dependent upon a rejected parent claim.

Applicants wish to thank Examiner Betelham Shewareged for the courteous and productive telephone interview with applicants' undersigned counsel on July 28, 2004.

The present invention is directed to an ink-jet recording material having at least a support, a pigment containing lower layer on the support, and a pigment containing upper layer above the lower layer. The pigment of the upper layer has two particle size distributions A and B. This pigment is different from the pigment of the lower layer. Moreover, the average particle size of the pigment of the upper layer is different from the average particle size of the pigment of the lower layer. The two particle size distributions A and B of the invention in the upper layer as set forth in claim 1 are (A) 10 to 100 nm and (B) 1000 to 3000 nm.

As discussed during the telephone conference, there are at least two aspects of the present invention which clearly define over OTOUMA et al. both under 35 U.S.C. §§ 102 or 103.

The first aspect is that the weight ratios of A:B as set forth in dependent claim 2 clearly define over the weight percentages set forth in OTOUMA et al. The A:B ratio of 8:1-20:1 as set forth in claim 2 is 8/9-20/21 which is 88.9-95.2%. In other words the smaller particle size A of 10 to 100nm is present in the amount of 88.9-95.2% of the pigments in dependent claim 2. In direct contrast to those percentages, the non-spherical particles which are the smaller particle size of 100-20,000nm in OTOUMA et al. are limited to less than 70%. See column 4, line 66 - column 5, line 3 and claim 8. This is substantially less than the percentages of the small particle size A as set forth in claim 2.

Given this wide difference in smaller particle size percentages, Examiner Shewareged indicated during the interview that claim 2 appears to be allowable. Accordingly, claim 2 has been rewritten in independent form as claim 1 and claim 2 has been cancelled.

A second aspect in which the present invention defines over OTOUMA et al. is that there is an opening of 101-999nm between the A particles of 10-100nm and the B particles of 1000-3000nm.

However, there is no such opening in the particle sizes of 100-50,000nm or 100-20,000nm as disclosed by OTOUMA et al.

Examiner Shewareged indicated during the interview that original claim 1 was open ended and therefore did not preclude the presence of pigments having particles sized 101-999nm. However, if a claim was presented similar to original claim 1 but including the language that the pigment of the upper layer "consists essentially of" the two particle size distributions A and B, that such claim would be allowable. Accordingly, new claim 14 has been presented including this language and should be clearly in condition for allowance.

Finally, new independent claim 13 has been added which is previously allowed dependent claim 10 rewritten in independent form, and claim 10 has been cancelled. Because claim 10 was previously indicated to be allowable, new independent claim 13 also should be clearly allowable.

For the above reasons, it is respectfully submitted that all of the claims remaining in the present application, claims 1, 3-9 and 11-14, are in condition for allowance. Accordingly, favorable reconsideration and allowance are requested.

Respectfully submitted,



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